# THE BURNHAM COLLECTION (LEPIDOPTERA): FROM REV. PÉRE J.B. PONCELET IN BOUGAINVILLE TO GOLD COAST GARAGE

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#### Abstract

A butterfly collection inquiry at the Queensland Museum initially appeared to contain little scientific value. Further investigation, however, led to a historical chase through collections, databases, the web and literary records to determine the collection locality and collector of the specimens. Rev. Pére J.B. Poncelet is followed through his collections on Bougainville to scientific acknowledgement in many biological arenas.

#### Introduction

In mid 2007, one of us (CL) received a referral from the Queensland Museum inquiry desk concerning a phone call from Sam Burnham, who wanted some advice on a butterfly collection found in his Gold Coast garage while organising his late father's effects. The collection was housed in a single wooden box (Fig. 1) with a tightly sealed glass lid. On top of the contents was a folded sheet of *Nieuwe Rotterdamsche Courant*, an influential, Rotterdam based, liberal Dutch daily newspaper founded in 1844 by Henricus Nijgh (Wikipedia 2007), with the date clearly seen as 23 April 1925 (Fig. 2).

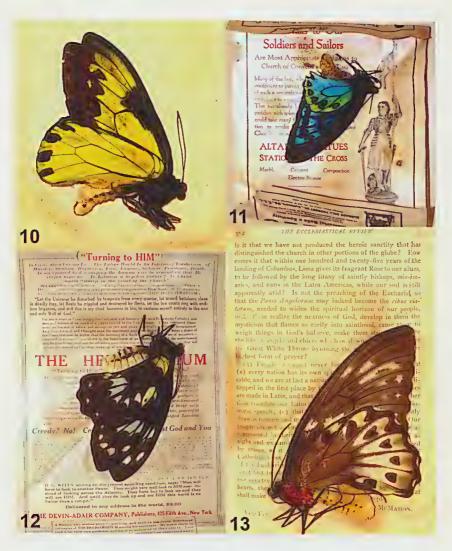
Inside the box (Fig. 1) were a matchbox containing headed pins (Fig. 3), one large envelope, three rolls of setting paper, a pack of No. 5 insect pins, many scattered insect pins, a cutout photograph of butterflies and 52 folded papers of various sizes (Figs 4-6). While 13 of the papers were plain (Fig. 5), 39 were made from folded pages removed from assorted books or periodicals, 19 of them Ecclesiastical (Figs 4, 6). These included pages from 'Studies in St Jerome and St Augustine', 'The Loneliness of the Priest', 'Eucharistic Preaching' (Figs 4, 6), 'The Little Israelite' from the 'Messenger' dated 1/3/17 (Figs 4, 6) and the American 'The Ecclesiastical Review' (Fig. 13), published between 1901-1943. Advertisements for Church furniture, Sabbath bells, school equipment, acoustic tiles for church walls and ceilings (Fig. 6) and statues (Fig. 11) were also featured.

#### The collection

The papers contained an assortment of butterflies, mainly 'birdwings' (Papilionidae) (Figs 10-13), including four pairs of the CITES-listed Queen Victoria's birdwing, *Ornithoptera victoriae regis* (Rothschild, 1895) (Figs 10, 12) and 12 males and 11 females of the blue form of the northern birdwing, *Ornithoptera priamus urvillianus* (Guérin-Méneville, 1838) (Figs 11, 13).



Figs 1-9. (1), inside the Burnham Collection box. (2), Nieuwe Rotterdamsche Courant newspaper dated 23 April 1925. (3), matchbox containing headed pins. (4-6): folded papers: (4), Ecclesiastical papers: Eucharistic Preaching, The Little Israelite and part of an advertisement; (5), plain paper with 'Buin' and initials 'J.B.P.'; (6), Ecclesiastical papers: Eucharistic Preaching, The Little Israelite and an advertisement for 'Acoustile'. (7-9): butterflies within papers: (7), Vindula arsinoe sapor; (8), Cyrestis acilia nitida; (9), Papilio phestus reductus. Photographs by N. Starick.



Figs 10-13. Birdwings. (10), Ornithoptera victoriae regis male; (11), Ornithoptera priamus urvillianus male among the statues; (12), Ornithoptera victoriae regis female 'Turning to HIM'; (13), Ornithoptera priamus urvillianus female in 'The Ecclesiastical Review'. Photographs by N. Starick.

The following butterfly species were also present: Papilio phestus reductus Rothschild, 1915 (Fig. 9) and Papilio toboroi Ribbe, 1907 (Papilionidae); Catopsilia pomona (Fabricius, 1775) and Delias schoenbergi schoenbergi Rothschild, 1895 (Fig. 15) (Pieridae); Tellervo hiero hiero (Godman &

Salvin, 1888) (Fig. 16) (Danainae), Argyronympha pulchra Mathew, 1886 (Fig. 18) (Satyrinae), Cyrestis acilia nitida (Mathew, 1887) (Fig. 8) (Apaturinae), Phaedyma fissizonata pisias (Godman & Salvin, 1888) (Fig. 17) (Limenitidinae), Mynes woodfordi woodfordi Godman & Salvin, 1888 (Fig. 14) (Nymphalinae) and Vindula arsinoe sapor (Godman & Salvin, 1888) (Fig. 7) (Heliconiinae) [all family Nymphalidae] (Parsons 1998, Tennent 2002, 2006). Also included are two specimens of the large and conspicuous moth Lyssa mutata Butler, 1887 (Fig. 19) (Uraniidae).

Initial inspection of the collection indicated that the specimens had little scientific value, as no locality, date, or collector information was included. It was thought that an interested collector might be willing to set some of the specimens in a display box for the family in return for the remainder of the specimens, but closer examination identified considerable insect pest damage. The specimens were not suitable for mounting and display.

Our interest turned to where this collection originated. While *Ornithoptera priamus* (Linnaeus) is widespread from the Moluccas and New Guinea east to the Solomon Islands and south to Australia, the 'blue' form, *O. p. urvilliamus*, has a much more restricted distribution of Solomon Islands, Bougainville and New Ireland, while *Ornithoptera victoriae* Gray and *Lyssa mutata* are restricted to the Solomon Archipelago (Bougainville and the Solomon Islands). *Ornithoptera victoriae regis* is known only from Bougainville, the Shortland Islands (Alu) and Choiseul (Haugum and Low 1978, Tennent 2002). The distribution of *Argyronympha pulchra* is limited to Bougainville and the western part of the Solomon Islands (Tennent 2002). Sam Burnham was able to inform us that his father, Jeffrey Thomas Burnham, had worked in Papua New Guinea and might have acquired the collection there.

The initials J.B.P. and the name Buin (a settlement in southern Bougainville) appear on several of the papers (Fig. 5). The possibility was considered that these specimens were collected by local villagers for a Father Poncelet, who supported his mission by exporting specimens from Buin to collectors in other countries, particularly Australia. The second author (TH) knows of two Australian collectors, the now deceased David and Fred Smith of The Gap, Brisbane, who possessed specimens of both *Ornithoptera priamus urvillianus* and *O. victoriae regis* from Father Poncelet, that were probably collected by villagers.

#### Poncelet's contribution to Science

There appear to be several butterflies named after Poncelet. *Papilio ponceleti* Le Moult (a synonym of *Papilio woodfordi* Godman & Salvin, 1888) was described by Le Moult (1933) from a pair originating from Kieta, a settlement on the east coast of Bougainville. Oddly, although it occupied a full page, the description of *Papilio ponceleti* did not specifically mention Poncelet himself.



Figs 14-22. (14-19): Lepidoptera within folded papers: (14), Mynes woodfordi woodfordi; (15), Delias schoenbergi schoenbergi; (16), Tellervo hiero hiero; (17), Phaedyma fissizonata pisias; (18), Argyronympha pulchra; (19), Lyssa mutata. Photographs by N. Starick. (20): Ornithoptera 'allottei' in The Natural History Museum, London; photograph by J. Tennent. (21-22): Birdwings bearing Poncelet's name: (21), Ornithoptera victoriae regis f. ponceleti in The Natural History Museum, London; photograph by J. Tennent; (22), Ornithoptera victoriae regis f. ponceletanus; photograph by Mark Simon (Florida) and Gilles Deslisle (Canada).

A gynandromorph of *Ornithoptera victoriae regis* from Buin, now in The Natural History Museum, London (Fig. 21) was named *ponceleti* by Rothschild (1936). In his description of this fundamentally female *victoriae* with male coloration, Rothschild (1936) stated 'This extraordinary insect was sent to me by the Rev. Père Poncelet ... [from] Buin, Bougainville ... I name this  $\mathfrak{P}$  f. *ponceleti* after its captor'.

Rousseau-Decelle (1946) later described another aberrant specimen of *Ornithoptera victoriae regis* from Buin (Fig. 22) as '*Papilio (Ornithoptera) victoriae regis* Rothsch. f. indiv. O' *ponceletanus* Rousseau-Decelle' and said [in French] 'I dedicate this magnificent form of *victoriae regis* to R. P. Poncelet, the brilliant naturalist, for ... services to entomology and ornithology'.

Poncelet is recorded many times in association with zoological specimens, including birds. He is described as 'a missionary in the Buin area of Bougainville' who collected two of the first ten recorded specimens of the flightless Woodford's rail (Nesoclopeus woodfordi (Ogilvie-Grant, 1889) (Rallidae)) in the 1930s (Hadden 2002). His name also appeared in a very recent description of a new monotypic genus of frogmouth (Podargidae) from the Solomon Islands, where he is cited as 'Father J.B. Poncelet, a French missionary on Bougainville' who collected five of the earliest known specimens between 1936 and 1938; only 19 specimens are known to exist (Cleere et al. 2007). Danis (1937) included both these species in a list of over 50 bird specimens, from 26 species, from 'a collection sent by Father J.-B. Poncelet, missionary in the island of Bougainville and well-known naturalist of this region' [translated from French], to the Muséum National d'Histoire Naturelle in Paris. Poncelet also collected the vulnerable black bittern (Ixobrychus flavicollis (Latham, 1790) (Ardeidae)) from Bougainville on 27 December 1935 (Tarburton 2007).

One of the most remarkable records is Poncelet's collection of the first nine specimens of Poncelet's giant rat, *Solomys ponceleti* (Troughton, 1935) (Muridae), known only from the islands of Bougainville, Buka and Choiseul (Flannery 1995). Poncelet visited Ellis Troughton at the Australian Museum in Sydney in 1934 and offered to collect specimens for the museum. In little more than two years he supplied over a hundred specimens of mammals (Troughton 1936), including a young adult female and two skulls that were described by Troughton (1935) as *Unicomys ponceleti* Troughton. Poncelet subsequently sent two more specimens of this species to Troughton and four to the Musée Royal d'Histoire Naturelle in Belgium. Only another four specimens are known (Flannery 1995). Adults of this arboreal rodent weigh more than one kilogram and build large, loose stick nests in huge forest trees; the species is considered endangered (Flannery 1995) and was placed on the IUCN Red List of Threatened Animals in 1994.

Poncelet collected 11 specimens of a small bat from Buin, described by Troughton (1936) as *Pipistrellus angulatus ponceleti* Troughton, a subspecies of the New Guinea Pipistrelle (Vespertilionidae). Troughton (1936) also reported that the carefully recorded material sent by Poncelet to the Australian Museum included insects, fish and reptiles, mostly collected in a densely forested area 17 km inland from Buin. Kinghorn (1937) described one of these, a skink, as *Tribolonotus ponceleti* Kinghorn (Scincidae) from a solitary specimen, noting that it was named after Father Poncelet, the 'collector of many excellent specimens of many kinds for the Trustees of the Australian Museum'.

Many years later, Greer and Parker (1968), in their description of *Tribolonotus pseudoponceleti* Greer & Parker (Scincidae), noted that papers accompanying Poncelet's material in the Australian Museum stated that the 'specimens were collected during the months of September and October 1934, by Father J.B. Poncelet S.M., of the Buin Catholic Mission' (Greer and Parker 1968). The Australian Museum database currently records 386 specimens in their collections collected by Poncelet from the Buin district, including 27 species of reptile (95 specimens), one species of possum (8), four species of rodent (32) and bird (4), and eight species each of frog (47), bat (127), and crustacean (72). Curiously, no records of butterflies collected by Poncelet are included in the database.

Père Poncelet was a contemporary of Père Allotte, who also lived and worked at Buin. Allotte is better known to entomologists because of the famous *Ornithoptera 'allottei'* (Rothschild, 1914) (Fig. 20), collected at Buin in 1913 and which many, including Rothschild, considered to be a distinct species of *Troides* Hübner or *Ornithoptera* Boisduval. It is now certain that *allottei* is a naturally occurring hybrid between *O. priamus urvillianus* and *O. victoriae* (Haugum and Low 1978, Haugum 1990, Tennent 2002). Père Allotte claimed that it was a hybrid from the beginning and Poncelet is said to have agreed with this assessment (Rousseau-Decelle 1939).

Examination of incoming letters from the North Solomons Region to the Procurator's Office of the Oceania Marist Province Archives confirmed that Poncelet and Allotte were contemporaries. Sixteen letters were received between 4 February 1919 and 26 September 1928 from Jean-Baptiste Poncelet SM [Society of Mary], 1884-1958, and 62 letters were received between 10 February 1905 and 1 July 1927 from Francois Allotte SM (Cook 1986). It would appear from biological publications that Father Poncelet remained on Bougainville for some time after 1928 and Laracy (1976) noted that J.B. Poncelet served in southern Bougainville from 1939-1950 (except for a period from 1942-1946). Nelson (2007) mentioned a diary written by an R.P. Poncelet, a Catholic missionary and Belgian national, who was taken from Bougainville and moved to New Britain by the Japanese in World War II, included in a book by Patrick O'Reilly and Jean-Marie Sedes (1949).

Apparently, Poncelet was a member of the Marist Fathers Order and not a Marist Brother (L. McCane, pers. com.). Poncelet was among the priests who welcomed the first Marist Brothers to Bougainville on their arrival at Torokina on the west coast on 17 June 1948 (McCane 2004). However, it is noted that 'In the North Solomons, benefaction was stimulated by the protestant incursion, particularly in Buin, where J.B. Poncelet was known to bolster wavering faith, not only with tobacco, calico and tinned meat, but with gifts of money. Such tactics were prudently discouraged ...' (Laracy 1976).

Variation in citing Poncelet's initials by Rousseau-Decelle (1946) and Nelson (2007) may be as a result of reference to his title, Rev. Père, as used earlier by Rothschild (1936). It is considered unlikely that both a Belgian and a French missionary of the same surname were present at Buin at much the same time.

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#### References

CLEERE, N., KRATTER, A.W., STEADMAN, D.W., BRAUN, M.J., HUDDLESTON, C.J., FILARDI, C.E. and DUTSON, G. 2007. A new genus of frogmouth (Podargidae) from the Solomon Islands - results from a taxonomic review of *Podargus ocellatus inexpectatus* Hartert 1901. *Ibis* 149(2): 271–286.

COOK, T.B. 1986. Oceania Marist Provice Archives. OMPA 387. http://rspas.anu.edu.au/pambu/reels/OMPA/OMPA\_361-400.PDF

DANIS, V. 1937. Étude d'une nouvelle collection d'oiseaux de L'Ile Bougainville. *Bulletin du Muséum national d'Histoire naturelle. 2éme série*, 9: 119-123.

FLANNERY, T.F. 1995. Mammals of the south-west Pacific and Moluccan islands. Reed Books, Chatswood, Sydney.

GREER, A.E. and PARKER, F. 1968. A new species of *Tribolonotus* (Lacertilia: Scincidae) from Bougainville and Buka, Solomon Islands, with comments on the biology of the genus. *Breviora* 291: 1-23.

HADDEN, D. 2002. Woodford's rail (Nesoclopeus woodfordi) on Bougainville Island, Papua New Guinea. Notornis 49: 115-121, plates 6-8.

HAUGUM, J. 1990. Ornithoptera allottei - a natural hybrid. Papilio International 6(3): 471-475.

HAUGUM, J. and LOW, A.M. 1978. A monograph of the birdwing butterflies. The systematics of Ornithoptera, Troides and related genera. Vol 1, part 1. Introduction, Ornithoptera (Aethioptera). Scandinavian Science Press, Klampenborg; pp 11-84.

KINGHORN, J.R. 1937. A new species of skink from the Solomon Islands. *Records of the Australian Museum* 20(1): 1-2.

LARACY, H. 1976. Marists and Melanesians - A history of catholic missions in the Solomon Islands. ANU Press, Canberra.

LE MOULT, E. 1933. Formes nouvelles ou peu connues de Papilionidae (Lép.). *Novitates Entomologicae* 2: 15-16.

McCANE, L. 2004. Melanesian stories: Marist Brothers in Solomon Islands and Papua New Guinea 1845-2003. Marist Brothers Madang, Papua New Guinea.

NELSON, H. 2007. Report on historical sources on Australia and Japan at war in Papua and New Guinea, 1942-45. http://rspas.anu.edu.au/papers/sources.html

O'REILLY, P. and SEDES, J.-M. 1949. Jaunes, noirs and blancs: Trois années de guerre aux Iles Salomon. Editions du Monde Nouveau, Paris.

PARSONS, M.J. 1998. The butterflies of Papua New Guinea: their systematics and biology. Academic Press, London; xvi + 736 pp, xxvi + 136 pls.

ROTHSCHILD, W. 1936. On a female of *Troides victoriae regis* with male coloration. *Annals and Magazine of Natural History* (10) 17: 306-307.

ROUSSEAU-DECELLE, G. 1939. Note sur nouvel exemplaire de *Troides allottei* Rothschild (Hybride d'*Ornithoptera victoriae regis* Rothsch et d'*Ornithoptera urvilleanus* Guér) [Lep: Papilionidae]. *Bulletin de la Société entomologique de France* 44(7-8): 97-101.

ROUSSEAU-DECELLE, G. 1946. Contribution à l'étude des *Papilio* de la faune Indo-Océanienne (Lep. Papilionidae). *Bulletin de la Société entomologique de France* 51(9): 128-133.

TARBURTON, M.K. 2007. Bougainville bird checklist PNG. http://birdsofmelanesia.net/png/bougainville.pdf

TENNENT, W.J. 2002. Butterflies of the Solomon Islands: systematics and biogeography. Storm Entomological Publishing, Dercham, Norfolk; xxiii + 413 pp.

TENNENT, W.J. 2006. A checklist of the butterflies of Melanesia, Micronesia, Polynesia and some adjacent areas. *Zootaxa* 1178: 1-209.

TROUGHTON, E. Le G. 1935. A new genus and species of giant rat from the Solomons Group. *Records of the Australian Museum* 19: 259-262.

TROUGHTON, E. Le G. 1936. The mammalian fauna of Bougainville Island, Solomons Group. *Records of the Australian Museum* 19: 341-353.

WIKIPEDIA. 2007. http://en.wikipedia.org/wiki/Nieuwe\_Rotterdamsche\_Courant